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## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

## REGION IV

345 COURTLAND STREET, N.E. ATLANTA, GEORGIA 30365

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FEB 2 1 1995

4WD-SSRB

Jeff D. Wyatt Senior Environmental Engineer Chevron Chemical Company 6001 Bollinger Canyon Road San Ramon, CA 94583-0947

SUBJ: EPA Review

Revised Feasibility Study

Chevron Chemical NPL Site - Orlando, FL

Dear Mr. Wyatt:

EPA considers the overall content and format of revised Feasibility Study (FS) to be acceptable. However, enclosed please find EPA comments regarding certain points contained within the FS. These comments do not require the submittal of another revised FS. If you have any questions, please contact me at (404) 347-2643, ext. 6241.

Sincerely,

Randy Bryant

Senior Remedial Project Manager South Superfund Remedial Branch

Enclosure

cc: Susan Tobin, TASK Environmental

## ENCLOSURE EPA REVIEW COMMENTS ON REVISED FS REPORT CHEVRON CHEMICAL NPL SITE

- 1. Page 1-7: As noted before, it is unlikely that the presence of benzene at the Site is the result of off-site sources. Available information suggests that possible contamination from the active gas station has not migrated to the Site.
  - 4,4-DDD was also detected in MW-3S. This compound has been detected several times in groundwater during the 3 years of site investigations, including Hydropunch results.
- 2. Page 2-1: Future residential use of the Site has a total estimated excess cancer risk of at least 1 x 10<sup>-3</sup>.
- 3. Page 2-2: The hazard indices for a hypothetical future adult resident and child resident are 2 and 8, respectively.
- 4. Page 2-3, second paragraph: In spite of the various uncertainties associated with the risk assessment process, the risk assessment is the best available method to evaluate risks associated with Superfund sites. However, a complete characterization of the uncertainties associated with the risk assessment should include the following items which may result in an underestimation of risk:
  - -some compounds are routinely eliminated from risk assessments if the compound has no assigned reference dose or slope factor.
  - -the assumption of additive properties of dosage ignores possible synergism or antagonism among themicals.
  - -elevated sample quantitation limits, particularly for soil, could mask the presence of other organic constituents. As a result, some compounds may be present but be eliminated from the risk assessment.
- 5. Section 2.2.2: The Baseline Risk Assessment was finalized during February 1995. The final Baseline Risk Assessment and the Feasibility Study (completed during December 1994) are in substantial agreement. However, please refer to the Baseline Risk Assessment for final risk values and related items. Also, please be aware that target risk levels will be set by EPA with consideration for risk assessment principles and the particular circumstances associated with potential exposures.
- 6. Page 2-8, Section 2.2.2.4 and Table 2-1: It is unlikely the soil RAOs listed here are below current analytical detection limits. For example, the Phase II Data Report, dated 11/93, listed detection limits for BHCs in soil ranging from 4 to

400 ug/kg, with the majority being less than 80 ug/kg. The benzene and ethylbenzene detection limits were typically listed as 5 ug/kg.

Previous detection limits may have been elevated due to the high levels of organic compounds present in soil prior to the removal. However, this interference is unlikely to occur given the reduced organic contaminant concentrations now present at the Site.

7. Section 3.2.2: It may be beneficial to install an additional well(s) southwest of MW-11D as part of any groundwater alternative that includes monitoring. The purpose of the new well(s) would be to more accurately monitor the rate of any potential contaminant migration in a northeast direction.

Also, it is likely that a groundwater monitoring program would include quarterly or semi-annual sampling during the first two years. The frequency, analytical parameters, and number of wells could possibly be adjusted afterwards depending on observed monitoring trends.

Finally, it may be necessary to add deed restrictions to prohibit residential use of the Chevron property.

- 3. Section 3.2.3.2: It seems unlikely that an active pump treat system would require an "excessive" amount of time to reach RAOs, especially when compared to natural attenuation.
- Section 3.2.4: The proposed addition of 10% peat to the native soils may result in a lower permeability that the native soils. The filter wall may then act as a slurry wall, causing contaminants to flow around the wall instead of through it. Ground water flow modeling should be revised to model the hydraulic effects of emplacement of the filter wall. It may be necessary to control changes in hydraulic flow resulting from installation of the filter wall so that the local ground water velocity is not increased around the wall, thus carrying contaminants into uncontaminated areas.